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EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2674

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/716,535

Applicant(s)

ROUX, NICOLAS

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/062,671.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/20/04, 6/9/05.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/23/2005 has been entered. An action on the RCE follows:
2. This office action is made in response to applicant's amendment/argument filed on 12/23/2005. Independent claims 1 and 12 are amended. Thus, claims 1-30 are currently pending in the application.
3. Applicant's arguments, see pages 9-11, filed 11/23/2005, with respect to the rejection(s) of claim(s) 1-30 under the statutory basis for the previous rejection have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 10/716,483.

Current Application recites at least one limitation in claims 1 and 12 “an auxiliary object marker on the display, responsive object by responsive object, so as to designate another responsive object without affecting control of the main object marker”, whereas the conflicting copending Application No. 10/716,483 recites at least one limitation in claims 1 and 10 “discretely displacing an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker”. It would have been obvious to make the claimed limitation of the current Application and copending Application No. 10/365,654 are different, but this limitation performs the same functionality for the movement of the first cursor and the second cursor on the display screen independently of each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1 and 12 of this application conflict with claims 1 and 10 of Application No. 10/716,483. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

7. Claims 1-30 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14-17, 19-23, 27, 42, 45, and 47-50 of copending Application No. 10/062,671.

Current Application recites at least one limitation in claims 1 and 12 “an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by responsive object, so as to designate another responsive object without effecting control of the main object marker” whereas the conflicting copending Application No. 10/062,671 recites at least one limitation in claim 14, 45, 47 and 48 “auxiliary control means, which are arranged so that they can also be actuated by said operator, that control an auxiliary object marker without affecting control of said main object marker”. It would have been obvious to make the claimed limitation of the current Application and copending Application No. 10/062,671,654 are different, but this limitation performs the same functionality for the movement of the first cursor and the second cursor on the display screen independently of each other.

Current Application recites at least one limitation in claims 26 and 30 "wherein the cursor control device and the auxiliary control device are configured so that control of the main object marker by the cursor control device has priority over control of the auxiliary object marker by the auxiliary control device when both markers are on a same window", whereas the conflicting copending Application No. 10/062,671 recites at least one limitation in claims 14, 45, 47 and 48 "wherein control of the main object marker by said cursor control device has priority over control of the auxiliary object marker by said auxiliary control means when the two markers, main and auxiliary, are on the same interactive window". It would have been obvious to make the claimed limitation of the current Application and copending Application No. 10/365,654 are different, but this limitation performs the same functionality for the movement priority of the first cursor over the second cursor on the same display screen.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1, 12, 26 and 30 of this application conflict with claims 14, 45, 47 and 48 of Application No. 10/062,671. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

***Drawings***

9. The drawings (figure 1) are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: a dialog device 1, a computer 3, left window screens E1 to E3 for pilot, right window screens E6 to E8 for copilot, a left cursor control device 5, a right cursor control device 5, a left auxiliary control device 8, a right auxiliary control device 8, at pages 8 and 9. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 12-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Regarding claim 12, the word "means" is preceded by the word(s) "displaying", the word "means" is preceded by the word(s) "moving", and the word "means" is preceded by the word(s) "causing" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

#### ***Claim Objections***

13. Applicant is advised that should claim 1 be found allowable, claim 12 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### ***Information Disclosure Statement***

14. The information disclosure statement filed 02/20/2004 and 06/09/2005 which has been placed in the application file, the information referred to therein have been considered as to the merits.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 12, 4, 5, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (US 6,784,869) in view of Briffe et al (IDS cited, US 6,112,141).

16. As to claims 1 and 12, Clark et al teaches a dialog system for dialog between an operator of an aircraft and at least one system of the aircraft, comprising:

a display configured to display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft [at least one display window 206 (fig. 2) includes a plurality of objects associated with one of multiple functions 210, see fig. 2, col. 6, lines 60-64];

a cursor control device including a cursor moving mechanism configured to move a cursor on the display so as to designate a responsive object such that when a cursor is one the responsive object, a main object marker appears and designates the responsive object [a cursor control device (CCD) 212 (fig. 2) including a cursor moving mechanism. The cursor is placed on the desired menu item, see col. 5, lines 55-56.

Thus, the cursor is placed on the desired menu item corresponds to a main object marker as claimed];

an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by object [The switches 212a1, 212a2, and 212a3 (fig. 2A) corresponding to an auxiliary control device including a discrete moving mechanism, see col. 6, lines 24-28];

Accordingly, Clark et al teaches all of the claimed limitations, except for displacing an auxiliary object marker on the display object without affecting control of the main object marker.

However, Briffe et al teaches displacing an auxiliary object marker on the display object without affecting control of the main object marker [a display computer coupled to the display devices and the cursor control devices for generating a plurality of movable cursors upon the display devices, each cursor being controlled by one of the cursor control devices to move independent of all other cursors across all display devices of the entire work area, see claim 1, col. 43, lines 26-31].

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the movement of the first cursor and the second cursor on the display independently of each other corresponding to displacing an auxiliary object marker on the display object without affecting control of the main object marker as taught by Briffe et al in the Clark et al's aircraft input devices in order to achieve the benefit of intend to control the cursors, because this would provide an improved flight information and control system which permit simplified flight planning and navigation procedures, reduced cost, reduced pilot workload, and improved safety (see Briffe et al, col. 2, lines 60-64).

17. As to claims 4 and 15, Briffe et al teaches a QWERTY keyboard 34 for entering data and including the discrete keys (the upper, lower, left, and right cursor keys), see fig. 1, col. 5, lines 44-45.

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18. As to claims 5 and 16, Briffe et al teaches two menu pages display different areas, each devoted to one of the devices managed by Multi-function Control Units 26, 28, see col. 23, lines 47-49. The keyboard 34 includes the discrete keys, see fig. 1, col. 5, lines 44-45.

19. Claims 1-3, 7-9, 11-14, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (US 6,784,869) in view of Ebert et al (newly cited, US 5,931,874).

20. As to claims 1 and 12, Clark et al teaches a dialog system for dialog between an operator of an aircraft and at least one system of the aircraft, comprising:

a display configured to display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft [at least one display window 206 (fig. 2) includes a plurality of objects associated with one of multiple functions 210, see fig. 2, col. 6, lines 60-64];

a cursor control device including a cursor moving mechanism configured to move a cursor on the display so as to designate a responsive object such that when a cursor is one the responsive object, a main object marker appears and designates the responsive object [a cursor control device (CCD) 212 (fig. 2) including a cursor moving mechanism. The cursor is placed on the desired menu item, see col. 5, lines 55-56. Thus, the cursor is placed on the desired menu item corresponds to a main object marker as claimed];

an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive

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object by object [The switches 212a1, 212a2, and 212a3 (fig. 2A) corresponding to an auxiliary control device including a discrete moving mechanism, see col. 6, lines 24-28];

Accordingly, Clark et al teaches all of the claimed limitations, except for displacing an auxiliary object marker on the display object without affecting control of the main object marker.

However, Ebert et al teaches displacing an auxiliary object marker on the display object without affecting control of the main object marker [the video graphics generator being responsive to position signals provided by the input device for moving the first cursor and the second cursor on the display independently of each other, see col. 10, line 65 through col. 11, line 2].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the movement of the first cursor and the second cursor on the display independently of each other corresponding to displacing an auxiliary object marker on the display object without affecting control of the main object marker as taught by Ebert et al in the Clark et al's aircraft input devices in order to achieve the benefit of intend to control the cursors, because this would improve user friendly interface is desired which allows the pilot to keep his or her hand on the aircraft's control stick and eyes on the multifunction display while selecting commands, reduces the number of operations required by the pilot, reduces the number of functions that the pilot must memorize and allows faster response time (see Ebert et al, col. 2, lines 50-55).

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21. As to claims 2, 7, 13 and 18, Clark et al teaches cursor control devices (CCDs) 212, 220 (see fig. 2) including a cursor moving mechanism and continuous manner. The cursor is placed on the desired menu item (see col. 5, lines 55-56) corresponding to a first activation mechanism. The switches 212a1, 212a2, and 212a3 (see fig. 2A) corresponding to an auxiliary control device defined a second activation mechanism.

22. As to claims 3 and 14, Clark et al teaches the switches 212a1, 212a2, and 212a3 (see fig. 2A) which are separate stand-alone unit.

23. As to claims 8, 9, 19 and 20, Clark et al teaches menu 314 would include selections (not shown) which when selected display a control panel or second menu (i.e., submenu) of options (not shown) that can be selected. However, with the interactive functions (e.g., CHKL, COMM, FUEL, Alpha Menu etc.), it is necessary to either press the menu select switch 308c, or move the cursor to an inactive area before pushing the CCD function select switch 308b to display the menu 310 or 314 (col. 8, lines 7-14).

24. As to claims 11 and 22, Clark et al teaches another set of the cursor control device and the auxiliary control device 220 (see fig. 2).

25. As to claims 24 and 28, Clark et al teaches the left and right multifunction CHKL, COMN, and NAV (col. 6, lines 63-64) are display in the window 210 (fig. 2). Thus, it would have obvious to provide CHKL, COMN, and NAV (the responsive objects) are arranged horizontally with respect to the window 210 as claimed.

26. As to claims 25 and 29, Clark et al teaches at least the switches 212a1 and 212a3 (fig. 2A). Thus, it would have been obvious to provide the left and the right cursor keys 212a1 and 212a3 that must comprises the horizontal direction as claimed.

27. Claims 6, 17, 26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al in view of Ebert et al as applied to claims 1 and 12 above, and further in view of Yoshino et al (US 5,548,304).

28. As to claims 6 and 17, the combination of Clark et al and Ebert et al teaches all of the claimed limitations, except for the main object marker has priority over the auxiliary object marker.”

However, Yoshino et al teaches a plurality of cursor control units A, B, C, D (see fig. 18a) including the function of priority access levels of both main cursor and auxiliary marker (see col. 12, lines 40-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to learn the teaching of Yoshino, e.g., controlling cursors including the functionality of priority access levels of the main cursor over auxiliary cursor for the combination of Clark et al and Ebert et al, because this would prevent the confusion and the damage to the image information due to mistakes by a plurality of operators of lower ranks (see Yoshino et al, col. 3, lines 12-20).

29. As to claims 26 and 30, Yoshino et al teaches in this priority case, the access acceptance levels of P1 will permit only the cursor under control of the instructor I so that the access acceptance level of page P1 is only that of the instructor's cursor or higher (col. 12, lines 47-51). Thus, it would have obvious to provide the instructor's

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cursor has priority over control of inherent auxiliary's cursor (student's cursor) are on the same window (the same screen 31, fig. 18b) as claimed.

30. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al in view of Ebert et al as applied to claims 1 and 12 above, and further in view of Oder et al (US 5,475,594).

The combination of Clark et al and Ebert et al teaches all of the claimed limitations, except for the key is activated during an emergency mode of the aircraft.

However, Oder et al teaches the key 39 which activates the emergency menu 52 (fig. 6, col. 9, lines 34-45).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the auxiliary control device including the key 39 which activates the emergency menu 52 as taught by Oder et al in the auxiliary control device of Clark et al and Ebert et al, because one skilled in the art would recognize that this would provide the operator to access certain functions directly by a single action (pushing down the corresponding function key). These characteristics are obviously particularly advantageous in critical situations, and are reserved for particular functions, e.g. functions which are implemented when an important element (engine, etc.) of the aircraft fails.

31. Claims 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al in view of Ebert et al as applied to claims 1 and 12 above, and further in view of Muller et al (IDS cited, US 6,072,473).

The combination of Clark et al and Ebert et al teaches all the claimed limitations, except for the use of an actuatable confirmation device configured to confirm the responsive object having the main object marker.

However, Muller et al teaches a related dialog device which includes validation of the required area once it has been marked by the cursor (col. 5, lines 4-5). Thus, the validation means corresponds to the actuatable confirmation device as claimed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the input device including validation means corresponding to the actuatable confirmation device as taught by Muller et al in the combination of Clark et al and Ebert et al, because this would provide the pilot must then validate his choice by an action on the validating means (see Muller et al, col. 5, lines 28-29).

### ***Response to Arguments***

32. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Nguyen whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone


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number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin M. Nguyen  
Patent Examiner  
Art Unit 2674

KMN  
January 18, 2006



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